

# Schedule of Events

*Recognition Weekend • May 1-2, 2009*

## **Friday, May 1st**

- 9:00 a.m. – 5:00 p.m. . . . . .The Charles Proteus Steinmetz Symposium  
Presentations on student creative, scholarly and research achievement. Programs and information are available in the Arts Atrium, just inside the north entrance to Social Sciences and just inside the entrance to the Olin Building  
**Student presentation sessions begin at 9:00 a.m.**
- 1:00 – 4:00 p.m. . . . . .Becker Career Center Open House  
Becker Career Center
- 5:30 – 8:00 p.m. . . . . .AEPi & Golub House Cinco de Mayo Fiesta  
Golub House
- 6:30 p.m. . . . . .Steinmetz Symposium Banquet  
Upperclass Dining Hall  
**For Symposium presenters, their parents, guests, and faculty sponsors**
- 8:00 p.m. . . . . .The Union College and Community Orchestra and Choir  
Memorial Chapel  
“Steinmetz Concert 2009”

## **Saturday, May 2nd**

- 11:00 a.m. – 12:30 p.m. . . . . .Prize Day  
Memorial Chapel
- 12:30 – 1:30 p.m. . . . . .Prize Day Reception  
Reamer Campus Center Patio
- 1:00 – 2:00 p.m. . . . . .Union College Jazz Ensemble  
Taylor Music Center  
Fred L. Emerson Foundation Auditorium

### **The C-Store will be open:**

Friday from 8:45 a.m. – 11:00 p.m.  
Saturday from 10:30 a.m. – 11:00 p.m.  
Sunday from 10:00 p.m. – 11:00 p.m.

### **The Nott Memorial will be open:**

Friday from 9:00 a.m. – 8:00 p.m.  
Saturday from 9:00 a.m. – 6:00 p.m.  
Sunday from 10:00 a.m. – 6:00 p.m.


### **Bookstore will be open:**

Friday from 8:45 a.m. – 4:30 p.m.  
Saturday from 10:30 a.m. – 4:00 p.m.  
Sunday from 10:00 a.m. – 3:00 p.m.

### **Schaffer Library will be open:**

Friday from 8:00 a.m. – 10:00 p.m.  
Saturday from 10:00 a.m. – 10:00 p.m.  
Sunday from 10:00 a.m. – 2:00 a.m.

# Dedication

 Charles Proteus Steinmetz (1865-1923) was "the most widely known professor ever a member of the Union College faculty." Steinmetz served as the Chief Consulting Engineer of the General Electric Company and was widely regarded as the leading electrical engineer in the United States. He nonetheless took charge of Union's new electrical engineering curriculum, serving as Professor of Electrical Engineering and Applied Physics from 1902 until his death in 1923. Far from merely lending his name to the endeavor, Steinmetz served actively as a lecturer in both undergraduate and postgraduate courses. He wished for his students "the spirit of divine discontent, for without it the world would stand still."

Union is proud to dedicate The Charles Proteus Steinmetz Symposium on Student Creative, Scholarly and Research Achievement to the memory of this scholar, teacher, and practitioner.

Kristin M. Fox  
Director of Undergraduate Research

# Sessions are at the following times

## **Friday, May 1st, 2009**

### SESSION I

9:00 – 10:20 a.m. *Concurrent Oral Presentations* in Bailey Hall, the Humanities Building, the Olin Building, the Science & Engineering Center and the Social Sciences Building

### SESSION II

10:30 a.m. – 12:10 p.m. *Concurrent Oral Presentations* in the Arts Building, Bailey Hall, the Humanities Building, the Olin Building, Science & Engineering Center, the Social Sciences Building, and the Taylor Music Center

### SESSION III

12:20 – 1:50 p.m. *Poster Session, other Special Presentations*

### SESSION IV

2:00 – 3:20 p.m. *Concurrent Oral Presentations* in the Arts Building, Bailey Hall, the Humanities Building, the Olin Building, Science & Engineering Center, and the Social Sciences Building

### SESSION V

3:30 – 5:10 p.m. *Concurrent Oral Presentations* in the Arts Building, Bailey Hall, the Humanities Building, the Olin Building, Science & Engineering Center, and the Social Sciences Building

*Improvisational Theater Performance* in Yulman Theatre

4:00 – 5:30 p.m. *Dance Performances* in the Nott Memorial

8:00 p.m. Steinmetz Concert, Memorial Chapel

## **Saturday, May 2nd, 2009**

1:00 – 2:00 p.m. *Jazz Ensemble* in the Taylor Music Center, Fred L. Emerson Foundation Auditorium

Student Visual Arts exhibitions are in the Burns Arts Atrium throughout the weekend.

# Session I

## **9:00 – 10:20 a.m. Concurrent Oral Presentations**

### **Arts—215**

Moderator: Louisa Matthew

#### **Art History**

**KELLY CRAPAROTTA**

The Gift of Warhol

**MEGAN HYNDMAN**

Art, Death, and Politics in Renaissance Florence: The Tomb of Cosimo de' Medici

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### **Bailey Hall—201**

Moderator: Kim Plofker

#### **Mathematics I**

**SARAH BRITTON**

The Elliptic Curve Factoring Algorithm

**MARGARET CALLAHAN**

Leonhard Euler and The Motion of Comets in Parabolic Orbits

**SARAI CANARIO**

Mathematical Explanation of Pendulum Motion

**CHELSEA ZIOBRO**

Euler's Rechenkunst (Arithmetic)

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### **Bailey Hall—207**

Moderator: Rob Lauzon

#### **Biological Sciences I**

**COLLEEN EASTON**

Characterizing Gut Looping in Chicken Embryos

**AMY FRANKENTHALER**

Impact of Concomitant Immunosuppression on the Presentation and Prognosis of Patients with Melanoma

**MEGAN KAKNIS**

Developmental regulation of phagocyte receptor genes during the asexual budding cycle in an ancestral chordate.

**MATTHEW KEARNEY**

Developmentally-regulated expression of caspases during cyclic blastogenesis in a colonial urochordate.

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### **Bailey Hall—312**

Moderator: Joshua Hart

#### **Psychology I**

**ANDREW SCAPLEN**

Adventure programs: Long term effects on college students

**JORDAN ZELINGER**

The Effects of an Acute Bout of Aerobic Video-Exergaming on Cognitive Ability

**JENNIFER LACHANCE**

The Tripartite Security System: A Closer Look at its Effects Over a Series of Seven Days

**JAMES SCHWABACH**

Going All In: The effects of Mortality Salience on Risk-Taking While Gambling

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# Session I

## 9:00 – 10:20 a.m. *Concurrent Oral Presentations*

### Humanities Building—008

Moderator: Hans-Freidrich Mueller

#### Classics I

**MICHAEL GLICKMAN**

Insults: Their Importance and Impact in Ancient Rome.

**JESSICA LATINO**

The Fathers and Daughters of Ovid's *Metamorphoses* Mirrored in Augustan Society

**SHANNON PACKER**

Representations of Women Athletes in Ancient Greece

### Humanities Building—014

Moderator: Judith Lewin

#### English Honors Theses I

**MEREDITH LIPPMAN**

Political Implications in Rock and Roll Music from the Vietnam War Era

**KAREN SELCHICK**

Interpreting the Other Through Three Stages of Intellect in Harry Potter

**CARA GALLIVAN**

From Hanoi to Baghdad: An Analysis of Mainstream Press in Times of Foreign Conflict

**ERIN SCHUMAKER**

Changed Light, A Poetry Collection

### Humanities Building—019

Moderator: Andrew Morris

#### Disaster Relief and Prevention: Historical and Contemporary Perspectives

**CHRISTINA DEMPSEY**

Debilitating Disasters: The Incorporation of Mental Health in the Disaster Relief Act of 1974

**ALEX HANDIN**

Addressing the American Flood Problem: Flood Control Structures versus Flood Plain Management, an Environmental History Perspective

**SARAH YERGEAU**

Charity Hospital System: Suggestions for Change in the Aftermath of Hurricane Katrina

**GREGORY MITCHELL**

Tragedy at Memorial: Katrina's Effects on Health Care and the Euthanasia Debate

### Humanities Building—112

Moderator: Charles Batson

#### French & Francophone Studies

**STEPHANIE BERLIND**

Diderot, Voltaire, et les Défauts de l'Europe: The Manipulation of the Noble Savage to Criticize Western Society

**JESSICA DOLBEARE**

Women's Experiences in the Men's World of Soccer in France

**KAITLYN O'CONNOR**

Can France be both a Liberal Democracy and a Secular Nation?

**LAUREN OBST**

Public Service, Private Struggle: The Subversive Voice of a Canonized French Storyteller

### Olin Building—106

Moderator: Zhang Wu

#### Environmental Studies

**JESSICA STEIN**

The Role of Nuclear Energy in Addressing the Energy and Environmental Crisis

**ALEXANDIRA ZIRBEL**

A Social Impacts Study: Guam Military Buildup Effects on Marine Resources

# Session I

## 9:00 – 10:20 a.m. Concurrent Oral Presentations

### Olin Building—115 Nanotechnology

Moderator: Mike Hagerman

**STEVEN HERRON**

Third Generation Solar Cells Based on the Inclusion of Quantum Dots and Ruthenium Dyes within Laponite Films

**MICHAEL TOPKA**

Nanomorphology Studies of pEDOT in Organic-Inorganic Photovoltaic Devices

**URSULA WILLIAMS**

Functionalization of CdSe Nanocrystals for Inclusion in a Solar Energy Device

**MICHELLE ROGERS**

The Influence of Carbon Nanotubes in Softball Bats

### Olin Building—307 Environmental Science & Geoscience I

Moderator: Don Rodbell

**BRANDON BOLDT**

Late Holocene climate of the central Andes identified from sedimentary, stable isotopic, geochemical and biological proxies

**JORDAN SILLETTI**

An Energy Audit of Beuth House &amp; Richmond Hall

**AMANDA BUCCI**Timing of slumping determined from growth asymmetry in *Tsuga canadensis*, Bowman Creek, Mohawk River watershed, NY**DOUGLAS MERKERT**

Detrital zircon fission track ages of the Wishbone and Chickaloon (Paleocene-Eocene) formations in the Matanuska basin, southern Alaska

### Science & Engineering Center—N205 Computer Engineering & Computer Science

Moderator: Aaron Cass

**OWEN HENEGHAN**

Wii Punch: Tracking and Gesture Recognition for 3d Game Environments

**DANIEL GNOUTCHEFF**

Controlling Head Parking on Laptop Hard Drives

**UMBERTO CAPUANO**

Emergency Alert System for Union College Television and Radio

**NICKOLAS POTVIN**

A Pedagogical Tool for Usability Science

**BENJAMIN LYNCH**

Freeing video games from programmed restrictions

### Science & Engineering Center—N210 Persuasion

Moderator: George Bizer

**ALAN FOX**

Stereotypes and Advertising: The Relationship Between Personal Need for Structure and the Assessment of Race-Related Sports Advertisements

**MARISA GREENBERG**

Who's Buying It: Does Erikson's Theory of Psychosocial Development Predict Persuasion?

**ELISE WAKELAND**

Sex Guilt and Persuasion

**ROSE FOLEY**

Reducing Prejudice in Right-Wing Authoritarians: The Effect of Cognitive Dissonance in Changing Social Attitudes

# Session I

## 9:00 – 10:20 a.m. *Concurrent Oral Presentations*

Science & Engineering Center—N304

Moderator: Chad Orzel

Astronomy and Physics

DAVID LUDWIG

Laser Cooling and Trapping of Single Krypton Atoms

DAVID BARKER

Photometric Detection of Transiting Extrasolar Planets

THOMAS PERRY

Radio-Frequency Studies at Super-High Resolution of Two Compact Radio Galaxies

PETER BONVENTRE

Search for the Eta-Mesic Nucleus From Photo-Production on He-3 in CLAS

## Social Sciences Building—012

Moderator: Jennifer Matsue

East Asian Studies

JOHN FRANCIS

Shojo Manga Subverting Heteronormative Structures

JACQUELINE OSTROFSKY

The Worlds of Society and Self in Haruki Murakami's Fiction

## Social Sciences Building—014

Moderator: Linda Cool

Anthropology I

ANNE HANSON

Culture and Sex Education: Examining Notions of Cultural Sensitivity in Delivering Comprehensive Sex Education

KATHERINE NEWINGHAM

Cultural Barriers to Going Green

BRIAN ROSENBLATT

The Brunt of the Joke: Behind the Laughs in Fijian Society

TAMAR SOROKER

Corpulent Commercials: The Response of Television Food Advertisements to the Childhood Obesity Crisis in America

## Social Sciences Building—016

Moderator: Melinda Goldner

Sociology I

ANNIE BENFIELD

The N Word: Comprehending the Complexity of Stratification in American Community Settings

SHARONA MOORE

Images and Reflections of Black Mothering in Visual Culture and Empirical Literature

AMELIA WHITNEY

The Medicalization of American Maternity Care: A Social Analysis

SIDNEY OLEFSON

The Impact of Health Consumerism and Disease Advocacy Organizations on the Doctor-Patient Relationship

## Social Sciences Building—017

Moderator: Fuat Sener

Economics Honors I

ALEXANDRA GIROMINI

Has the Euro Affected where Germany Exports its Goods?

IAN DEMPSEY

Patent Power: A Driving Force in Industry Growth and Prosperity

MICHAEL DILLON

The Effects of Government Programs on Renewable Energy in the U.S.

NIKHIL PATEL

The determinants of corruption: Results from new data and instruments

# Session II

## 10:30 a.m. – 12:10 p.m. **Concurrent Oral Presentations**

Arts Building—215

Moderator: Chris Duncan

Visual Arts

MEGAN SESIL

Suggested Planes: Nature Abstracted

ALEXANDRA DUBODEL

Mary Cassatt and Berthe Morisot: Self-Portraits and Images Featuring Them by Edgar Degas and Edouard Manet.

IAN BRENNAN

I Don't Care Anymore

Bailey Hall—201

Moderator: Christina Tonnesen-Friedman

Mathematics II

JOHN ROBENS

Analysis and exploration of mathematical models pertaining to changes in body weight

PETER BONVENTRE

Mathematical Modeling on Cell Phone Energy Usage

STEVEN NEIER

JOHN ROBENS

KATE COLANTUONO

Phi: The Irrational Number

MICHAEL TOPKA

Batting Around with Continued Fractions: Exploring the use of Continued Fractions to Determine Batting Records

ANDREW MACKENZIE

The Mediancentre-Borda Rule and One-Way Monotonicity

Bailey Hall—207

Moderator: Scott Kirkton

Biological Sciences II

ELIZABETH NYBERG

Enzymatic Changes in *Schistocerca americana* Grasshoppers During Development

ELIZABETH STANFORD

The effect of hyperoxia and hypoxia on the production of lactic acid in the jumping muscle of the American Locust (*Schistocerca americana*).

MARGARET CAPOTOSTO

Evaluating Drag Forces Experienced by the Aquatic Frog *Xenopus laevis* During Gliding

ZACH PORTMAN

A 3-Dimensional Model of Bryophyte Canopy—Light Interaction

Bailey Hall—312

Moderator: Cay Anderson-Hanley

Psychology II

LARISSA CHUDOMEL

Interactive Video Exer-Games for Older Adults: Cognitive and Physical Effects

ROBYN SCHNEIDERMAN

Effects of Exergaming Autism

SARAH WESTEN

Mediating effects of BDNF and IGF-1 on videogame-enhanced exercise for older adults: Results from the Cybercycle Study

AMY KEMMLER

The Effects of Marketing Strategy, Income and Gender on Decision to Purchase: A Comprehensive Analysis of the Consumer Decision Making Process

NOZOMI SAKATA

Spirituality Alteration Following Dance Classes



# Session II

## **10:30 a.m. – 12:10 p.m. Concurrent Oral Presentations**

### **Humanities Building—014**

Moderator: Hugh Jenkins

#### **English/Modern Languages and Literatures**

<b>KIMBERLY GIAMBATTISTO</b>	Terroir: Philosophies of the Cuisines of France and China
<b>ELIZABETH MARIAPEN</b>	'Oh My God I Think I Love You, So What Am I So Afraid Of?': Milton's Paradise Lost and E. Lockhart's The Boyfriend List
<b>EMMA KROSSCHELL</b>	A Reader and a Writer: Poetic Exploration
<b>MILES KUEFFNER</b>	Surrealist Women: Objects or Subjects of Desire?
<b>MARIE SCHUBERT</b>	Spanish Immersion: Challenges and Controversies

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### **Humanities Building—019**

Moderator: Chalmers Clark

#### **Philosophy**

<b>DANIEL SCHIMMEL</b>	The Exchange of Personal Liberty for Security in the War on Terror: The Perversion of Our American Ideals and Law Under the George H. W. Bush Administrations
<b>JENNIFER ATCHINSON</b>	Resurrecting Terri Schiavo: Advance Directives in Modern America
<b>JESSICA HANDIBODE</b>	Who has the Right to Stop Treatment in Innovative Care, the Physician or the Patient?

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### **Humanities Building—112**

Moderator: Hans-Freidrich Mueller

#### **Classics II**

<b>RICHARD CAISTER</b>	Socrates: The Man, the Myth, the Legend
<b>GINA CHIUMINATTO</b>	The Problem of Formal Equivalence : Metrical translation of Anacreon and Baudelaire
<b>SARAH COLEMAN</b>	Thucydides as a Model for the Writings of Sallust: A Stylistic Comparison
<b>CHUCK FONTANA</b>	Translating the Jesuits: Syrian Mission of 1626

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### **Olin Building—106**

Moderator: Joanne Kehlbeck

#### **Chemistry and Chemical Biology**

<b>BRADLEY GOLDBERG</b>	The solid-phase synthesis of new peptoid molecular transporters
<b>ELIZABETH ZAMORE</b>	Synthesis and Evaluation of a Novel Molecular Transporter
<b>LAURA CASTELLANO</b>	Preparation of C2-Symmetric Transition Metal Complexes
<b>DANIEL BAILEY</b>	Investigating para-hydrogen induced polarization (PHIP) in hydrogenation reactions

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# Session II

## 10:30 a.m. – 12:10 p.m. **Concurrent Oral Presentations**

### Olin Building—115

Moderator: Janet Anderson

#### Biochemistry I

**MICHAEL VAN METER**

Abf1p: An Investigation into the Mechanism Underlying a Transcriptional Memory Effect in Yeast

**LUISA CABRERA**

The Effect of Side-chain Conformation on Dipeptide Electrostatic Energy

**DANIEL MARTINELLI**

IgA Mediated Protection against *Salmonella enterica* serovar Typhimurium Compromises Barrier Function

**EVAN SCHLOSS**

Cloning and Expression of a Metacaspase Gene from the mushroom-producing fungus *Schizophyllum commune*

**SHAZIA BAIG**

Identification and Cloning of a Second Putative Metacaspase from *Schizophyllum commune*

### Olin Building—307

Moderator: Jackie Cockburn

#### Environmental Science and Geoscience II

**JONATHAN CAMPANO**

Dendrogeomorphology as a means to measure inter-seismic subsidence, Alaganik Slough, Copper River Delta, Alaska

**JULIE LA SPINA**

The Effects of Fire and Deer Herbivory on Oak Regeneration in an Eastern Deciduous Forest

**NIELS OLSEN**

Making Compost Harder Better Faster Stronger

**JACOB KLEIN**

Photodegradation of Ultraviolet Filter Chemicals in Natural Surface Waters

### Science & Engineering Center—N304

Moderator: Becky Cortez

#### Mechanical Engineering I

**MATT BEENEN**

The Design and Construction of a High Efficiency and Performance Vehicle

**EDWARD LINCOLN**

**CAILEIGH WARREN**

Design of a Fiber Placement Nozzle in Manufacture of Composite Parts

**CHRISTINE FARRELL**

Investigation of Flow through Artificial Mitral Heart Valves and the Development of a Flow Simulation System

**BENJAMIN BRISTOW**

Design of a Self Inflating Personal Flotation Device able to be Manually Re-Armed

### Social Sciences Building—012

Moderator: Robert Hislope

#### Political Science I

**MEAGAN KEENAN**

What is to be Done?: Fordism and the demise of working class identity in the United States

**SHANIQUE KERR**

Jamaican Primary Level Education: Cultivating Global Leaders

**SEAN MULKERNE**

Bellum Americanum: The Neoconservative Influence on US Foreign Policy

**ZACHARY PATNODE**

The Clash and Rage Against the Machine Through the Lens of Marcuse and Gramsci

**GREG KARAMIAN KARAMIAN**

**ADRIENNE HART**

Music and its Emotional Effects in Politics: A Study on September 11th

# Session II

## **10:30 a.m. – 12:10 p.m. Concurrent Oral Presentations**

### **Social Sciences Building—014**

Moderator: Melinda Lawson

#### **History I**

**STEPHANIE BERLIND**

The Noble Savage and Europe:

**JARED IACOLUCCI**

Popular Opinion of the British Empire: An analysis of media coverage during the Arab Rising of 1920

**MICHAEL BARTLES**

Carpetbaggers: the Slandered Servants of Reconstruction

**JOHN NOBREGA**

Political Machines

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### **Social Sciences Building—016**

Moderator: Janet Grigsby

#### **Sociology II**

**MARIEL FOX**

Constantly Connected: The Internet's Effect on Face-to-Face Interaction

**ASHLYN PENDLETON**

Put Your Best Shoe Forward: An Exploration of Modern Fashion as a Way to Create Self-Identity and Manage Impression

**SHARONA MOORE**

Sexual Ambivalence: Understanding Race, Class, Gender and Attitudes Toward Prostitution

**KATIE PANDOLFO**

9/11 Health Activism

**JULIA VU**

Attitudes and Preference of Vietnamese People toward Folklore and Scientific Medicine

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### **Social Sciences Building—017**

Moderator: Eshragh Motahar

#### **Economics Honors II**

**PATRICIA LINDEN**

The Role of Uncertainty in Aggregate Investment

**MALLORY MASON**

Exploring State-Specific Policies to Address the Problem of Rising Obesity in the U.S.

**LINDSEY SHELLEY**

Interest Rates and Asset Bubbles: How Low is Too Low?

**FARIHA RAMAY**

Impact of Payer Status on Utilization of Ambulatory and Hospital Services

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### **Taylor Music Center—120**

Moderator: Timothy Olsen

#### **Music**

**LUKE BRYDEN**

Composition and Audio Production of an Original Concept Album

**PETER MACDONALD**

Changing Days

**MAXWELL TAYLOR**

Making the Musical: An Inside Look

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# Session III

**12:20 – 1:50 p.m. • Special Presentations**

Olin Rotunda

Moderator: Laurie Tyler

Poster Session I

**CHRISTOPHER PILLSBURY  
JOHANNAH RYAN  
MICHAEL MARTIN  
ANGELA MCLELLAND**

How fast are U? Integrating science, technology, engineering, and mathematics in testing reaction time.

**LINAH RUSERE**

Synthesis and Crystal Structures of Ni(II), Cu(II) and  $\mu$ -oxo-Fe(III) Complexes of a salen Type Ligand and Comparison to the Co(II) Analogue: Mononuclear Versus Multi-nuclear Complex Formation Based on the Identity of the Metal Center

**PHILIP CASTONGUAY**

The impact of color and motion on detection of visual stimuli in Anolis lizards.

**HUIQING ZHENG**

Engineering *Escherichia coli* for Enhanced Butanol Tolerance

**PAUL HEBERT**

Spectroscopic Analysis of Metal-Porphyrin Complexes in Aerogels

**CHARLES HARRINGTON**

Development of a Constant Acceleration Mössbauer Spectrometer for Environmental Research

**KATHERINE HALKYARD**

Evidence for a primitive water-absorbing organ in the little skate, *L. erinacea*.

**KATELYN O'BRIEN**

Using ALFALFA to Study the HI Content of the Galaxy Group NGC 5846

**GREGORY KELLY**

Solar PV Powered Thermoelectric Refrigerator

**LASANTHA PATHIRANA**

Development of Wind/Solar Hybrid Power System

**KYLE KESEL**

Does removal of invasive black locust ensure a successful return to pre-invasion soil characteristics?

**ELISABETH HIGGINS**

Medicare: Part D

**VIKRAM RAVIKUMAR**

The Distribution of Campaign Contributions in Congressional Races

# Session III

**12:20 – 1:50 p.m. • Special Presentations (cont'd)**

**Reamer Campus Center**

**Poster Session II**

Moderator: David Hodgson

<b>CONOR DODD</b>	Collaborative Control in Robotics
<b>DALE CHAPUT</b>	Evaluating the efficiency and mechanism of cellular uptake of a novel cell-penetrating peptide and peptoid
<b>DANIEL SPERO</b>	Searching for the Determinates of Retail and Business Development Success in Upstate New York's Post-industrial Cities
<b>TOMAS SADILEK</b>	Two-dimensional Gel Electrophoresis
<b>BENJAMIN COHEN</b>	Investigation of a Radiant Heating System
<b>ROCIO MONTERO</b>	Dido's Tragedy: Different Interpretations of Dido in Historical and Classical Texts in Comparison to Depictions of Dido in Baroque Art
<b>SHANNON BRADY</b>	The Geological History of Montserrat
<b>JOE CATALANO</b>	
<b>KAITLIN CLARK</b>	
<b>REBECCA GRONCZNAK</b>	Volcanic Processes of Soufriere Hills, Montserrat
<b>DOUGLAS MERKERT</b>	
<b>MATTHEW KISSANE</b>	
<b>TYLER WILLEY</b>	Monitoring Techniques Used On the Soufriere Hills Volcano
<b>BRANDON BOLDT</b>	
<b>STEVEN MCDERMOTT</b>	
<b>ZACHARY SMITH</b>	Bioassay guided fractionation of anthelmintic compounds from <i>Paulownia tomentosa</i>
<b>HYEON HWANGBO</b>	Improvement of an Enzyme Kinetics Experiment for a Biochemistry Course
<b>BRIAN CARD</b>	Machine Learning and Music: An Automatic Harmonization System
<b>VALERIE ANGELL</b>	Design and Application of Theatrical Makeup

# Session IV

## 2:00 – 3:20 p.m. *Concurrent Oral Presentations*

### Social Sciences Building—014 Anthropology II

Moderator: Karen Brison

<b>JULIA BERNSTEIN</b>	Assimilation and Acculturation in Guyanese-American teenagers in Schenectady
<b>JEFF HYDE</b>	"They can do that?": Issues of Identity, Privacy, and the Commercialization of Facebook
<b>KARA LIGHTMAN</b>	Domestic Violence in Cambodia
<b>EMMA SANDS-MILSOM</b>	The Evolution of Vegetarianism

### Arts Building—215 Mixed

Moderator: Zoe Oxley

<b>LUCIA REED</b>	The Proper Role of Religion in the Public Schools
<b>REBECCA SEEL</b>	American
<b>KAITY MODESTO</b>	"Fly Like a Bird"
<b>ROBERT SHIRLEY</b>	Public Displays of Political Action

### Bailey Hall—201 Neuroscience

Moderator: Steve Romero

<b>TATUM WEISHAUPT</b>	Academic Stress in First Year Students
<b>STEPHANIE MUGNAI</b>	Effects of Therapeutic Horseback Riding on Behaviors from the Autism Spectrum
<b>CASSANDRA BLANCHETTE</b>	Investigation of Ppt1 and other lysosomal storage disease genes during Drosophila neurogenesis
<b>DEIRDRE FINNEGAN</b>	Functional MRI and Eye Movement Desensitization and Reprocessing

### Bailey Hall—207 Economics I

Moderator: Brad Lewis

<b>PETER PETERS</b>	Should Denmark Join the Netherlands in the Euro Zone?
<b>VALENCIA STARR</b>	The Effect of Revitalization of Downtown Schenectady on the Low Income Population
<b>RYAN BOWES</b>	Health Care: Is the Single Payer System Right for the United States?
<b>SHAWN JOHNSTON</b>	Alumni Giving at Union College: An Economic Evaluation of the Determinants of Alumni Giving Behavior

### Bailey Hall—312 Psychology III

Moderator: Kenneth DeBono

<b>ANA HWANG</b>	Survival Processing: Is The Human Memory System Fine Tuned to Remember Survival Relevant Information?
<b>ELIZABETH FORTIER</b>	Social Context and its Effect on Personnel Slection Decisions of High and Low Self-Monitors
<b>SUSAN GRIFFIN</b>	The relationship between film and culture: the effectiveness of film on shaping attitudes toward homosexuality
<b>HUAN CHEN</b>	Children's Perceptions of Cyber Bullying vs. Traditional Bullying

# Session IV

## **2:00 – 3:20 p.m. Concurrent Oral Presentations**

### **Humanities Building—014** **English Honors Thesis II**

Moderator: Judith Lewin

<b>RANDEL BLEEKER</b>	"Doctoring is a human act": Emotions, Connections, and Relationships in Medical Memoirs.
<b>LAUREN OBST</b>	Enchanted Reflections: Transforming through Beauty and the Beast's Looking Glass
<b>KARA MCCABE</b>	The Struggle of Love and Sex: A Study of D.H. Lawrence's Relationship to Women in Sketches of Life
<b>WESLEY WHITAKER</b>	

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### **Humanities Building—019**

Moderator: Erika Nelson

#### **A Case for Community Service Learning: Serving Schenectady's Salvation Army**

<b>BRIAN KARIMI-PASHAKI</b>	Increasing the Efficiency and Effectiveness of the Salvation Army
<b>ELIZABETH LANZA</b>	Behind the Scenes at the Salvation Army
<b>REBECCA ROBINSON</b>	Sharing Stories of the Salvation Army
<b>LAUREN SHEVLIN</b>	Creating a Program of Change: Union Serving Schenectady --Students and the Soup Kitchen

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### **Humanities Building—112**

Moderator: Hans-Freidrich Mueller

#### **Classics III**

<b>MATTHEW ANGELOSANTO</b>	Roman Cultural Attitudes toward the Environment in Ovid's <i>Metamorphoses</i>
<b>JACQUELINE BLONSTEIN</b>	Revealing Role of Priests in Valerius Maximus
<b>ANDREW KEHL</b>	Romanization in the Greek East: Religious, Historical and Literary Identity
<b>SAMANTHA COHEN</b>	Greco-Roman Conquest of Egypt

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### **Olin Building—106**

Moderator: Nicole Theodosiou

#### **Biological Sciences III**

<b>MARIA-CLAIRE PIETAK</b>	Analysis of the Uptake Efficiency of Novel Cell Penetrating Peptides
<b>DANIELLE KIMBLE</b> <b>CARLY HYATT</b>	Color polymorphism in <i>Plethodon cinereus</i> : Mutations in the Melanocortin-1 Receptor
<b>CAROLINA DEN HARTOG</b>	Characterizing cell proliferation during gut looping in the developing chicken embryo
<b>EMMA LABROT</b>	Aquaporin Expression in the Distal Spiral Intestine of the Little Skate, <i>Leucoraja erinacea</i>

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# Session IV

## 2:00 – 3:20 p.m. **Concurrent Oral Presentations**

**Olin Building—115**

Moderator: Steve Horton

**Biochemistry II**

**ALYSSA GOLDBERG**

Investigating the role of a metacaspase in the mushroom fungus *Schizophyllum commune*

**COLETTE HYATT**

Investigating the role of cyclic AMP signaling in mushroom development in the spilt gill fungus, *Schizophyllum commune*

**MARTI GABRIELLA**

Expression and purification of scp1, a yeast metacaspase homolog, from *Schizophyllum commune*

**DEVIN HARRISON**

Development of an undergraduate laboratory: identification of an unknown tripeptide

**Olin Building—306**

Moderator: James Hedrick

**Electrical Engineering I**

**JONATHAN GOLD**

Applications of Piezoelectrics as a Battery-less Power Source

**KONSTANTIN AVDASHENKO**

Snowflake Analysis Using a Scanning Electron Microscope

**THOMAS DILAURA**

Implementation of MIT's Teaching AFM for an Undergraduate Course in Nanotechnology

**KATHLEEN RUCCI**

Using an Ultrasound to Detect Vibrations in Musical Instruments and The Human Voice

**ANDREW BARHITE**

**Olin Building—307**

Moderator: Laura MacManus-Spencer

**Environmental Science & Geoscience III**

**JONATHAN CAMPANO**

Video journal of a geologist: A week of explosions, ash, pyroclastic flows and rocks

**DANIEL BOWDEN**

A Baiting Technique to Reduce the Prevalence of Raccoon Roundworm in Allegheny Woodrat Habitat

**JOSEPH CATALANO**

Anisotropy of magnetic susceptibility and geochemistry The Hyde School Gneiss and Rockport Granite, Northwest Adirondack Lowlands

**MICHELLE WU**

Sorption of ultraviolet filter chemicals to sediment

**Science & Engineering Center—N205**

Moderator: Richard Wilk

**Energy Studies and Environmental Engineering**

**MATTHEW ADAMS**

Optimization of Building Energy on 712 Roger Hull Place

**ANDREW HEISER**

Performance of Pervious Rubberized Concrete in Severe Freeze-Thaw Conditions

**MALYSA CHENG**

ME/EE Hybrid Wind Turbine for the Union College Campus

**KEVIN DONOVAN**

**DAVID SANDERS**

Environmentally Friendly Building



# Session IV

## **2:00 – 3:20 p.m. Concurrent Oral Presentations**

**Science & Engineering Center—N304**  
**Mechanical Engineering II**

Moderator: Bill Keat

<b>ROBERT POWELL</b>	The Study of Humpback Whale Fins for Improved Airfoil Aerodynamics
<b>PATRICK LINGANE</b>	The Design and Fabrication of a Micro Mechanical Dragonfly
<b>WENDY BEATTY</b>	The Automation of Weaving
<b>BRIAN HURLEY</b>	Optimization of a Next Generation Submersible
<b>CHRIS KEINATH</b>	

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## **Social Sciences Building—012**

Moderator: Michele Angrist

**Political Science II**

<b>DEVIN BRODA</b>	The Political Development of the Modern Drug Enforcement Regime
<b>ARIEL SINCOFF-YEDID</b>	Incorporating Men into Development in Gender in the Arab Muslim World
<b>DANIEL SCHIMMEL</b>	Genocide and the Obligation of the International System to Distant Peoples
<b>LAURA DENIGRIS</b>	Student Political Protest of the Sixties and its Legacy
<b>LYNDSAY WEHRUM</b>	The Torture Policy: U.S. Torture and Its Discontents

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## **Social Sciences Building—016**

Moderator: David Cotter

**Sociology III**

<b>RACHEL KORMAN</b>	Sex Tourism and the Sex Industry in Thailand: Why this is a national and international problem and what is being done to help eradicate it
<b>ELIZABETH ACKLEY</b>	Enhancing Academic Performance through Art in Schenectady Youth
<b>MARGARET LICHT</b>	Edlercare in the United States: A Study of Nursing Homes and Quality of Life
<b>RACHAEL CARSON</b>	The World's Largest Tobacco Consumer: The role of China's Societal Customs and Socialist Government in the Smoking Epidemic

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## **Social Sciences Building—017**

Moderator: Steve Schmidt

**Economics Honors III**

<b>SAMUEL ELIAS</b>	Does the Inclusion of a Pension Plan in a Workers Contract Affect Their Wages?
<b>RYAN SELVIDIO</b>	The Economic Benefits of Different Tax Structures
<b>ALLEN PIEKARA</b>	Entrepreneurship in America
<b>AMAR SHAH</b>	Effects of Disability Management Initiatives on Productivity

# Session V

## **3:30 – 5:10 p.m.      *Concurrent Oral Presentations***

**Bailey Hall—207**

Moderator: Tomas Dvorak

**Economics II**

**DANIEL HANLEY**

Financial Literacy Among Union College Faculty and Staff

**JOHN SCHLICK**

The Effect of Foreign Ownership on U.S. Companies

**SHAYNA TOUBMAN**

Are women more generous than men?

**GABRIELA WINTNER**

Do Schools Level the Playing Field?

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**Bailey Hall—312**

Moderator: Linda Stanhope

**Psychology IV**

**MARIA TOBIN**

Improving Photo Retrieval in a Web Browser's History

**AMY SCHECK**

Including Children with Disabilities in Mainstream Classrooms: Opinions of Future Parents

**CLANCY SLACK**

Factors that Influence Public opinion Regarding Gay and Lesbian Adoption

**EMILY STEMLER**

Self-Monitoring and Theory of Mind in Three to Five-Year-Olds

**VANESSA TYLER**

Effects of self-monitoring on susceptibility to active and passive peer pressure to date during early adolescence

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**Humanities Building—014**

Moderator: Judith Lewin

**English Honors Thesis III**

**JENNA FRISCH**

Social Constructs: The American Dream and Masculinity

**MARGARET LEVINE**

Creating Feminine Science Fiction: A Cixousian Analysis of Ursula Le Guin

**MICHAEL MONTESANO**

We Hailed at the Twilight: A Cry for America, A Cry for Ourselves

**CHISTINA VINCENT**

Drawing Out the Devil: An Examination of Milton's Satan, Sin, and Death through Freudian and Jungian Analysis

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**Humanities Building—019**

Moderator: Victoria Martinez

**Mexican-American Border Mini Term**

**JARED IACOLUCCI**

The Battle for the Border: Working Conditions and Immigration Policy Along the U.S.-Mexico Border

**ERIN SCHUMAKER**

**MARGARET MCRUIZ**

Just Across the Fence: Daily Life for Mexican Migrant Workers and Other Border Residents

**MARIE SCHUBERT**

Border Fence--or Border Scar?

**CHRISTINA MALDONADO**

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# Session V

## **3:30 – 5:10 p.m. Concurrent Oral Presentations**

### **Humanities Building—112**

Moderator: Hans-Freidrich Mueller

#### **Classics IV**

**RACHEL HOGUE**

Apiculture in the Ancient Mediterranean World

**PETER MACDONALD**

Preserving Our Ancestor's Vision: American Neoclassical Architecture-Its Influential Role in the Foundation and Establishment of Our Nationalist Order

**SAMUEL WENGROVIUS**

Night in Plutarch's Lives

**KELLY ZEBROWSKI**

Nazi Germany: An Empire Borrowed From The Classical World

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### **Olin Building—106**

Moderator: Brian Cohen

#### **Biological Sciences IV**

**JILLIAN BANNISTER**

Analysis of Shi Wei Bai du Tang and Federal Oversight of Dietary Supplements

**KEVIN MCKENZIE**

The Investigation of Follicle Stimulating Hormone Receptor in Plasma Membrane Microdomain Residency

**AMY NESTLERODE**

Role of Lipid Rafts in Follicle Stimulating Hormone Signal Transduction

**CHRISTIAN SIKORA**

Effects on signal transduction of S80A and S80E isoforms of caveolin-1 and its interaction with Human Follicle Stimulating Hormone

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### **Olin Building—115**

Moderator: Mary Carroll

#### **Aerogels**

**MICHAEL BONO**

Fabrication of an Aerogel Composite Catalytic Converter

**LAUREN BROWN**

Fabrication of Titania Aerogels using the RSCE method

**MATTHEW SHERMAN**

Modifying the Mechanical Strength of Aerogels

**CHRIS BACKLUND**

Luminescent Probes of Hydrophobic Silica Aerogels

**VINCENT GILLICK**

Fabrication and Characterization of Drug-Doped Aerogels

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### **Olin Building—306**

Moderator: Helen Hanson

#### **Electrical Engineering II**

**PATRICK O'HERN**

A Singer's Guide to Vocal Disorders

**MATTHEW STATTON**

Biofeedback Training System for Improved Athletic Performance

**MALCOLM DENNISON**

Renewable energy: Pico Hydro Power Generation

**EDWARD HANCOCK**

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# Session V

## 3:30 – 5:10 p.m. Concurrent Oral Presentations

### Science & Engineering Center—N304

Moderator: Ashok Ramasubramanian

#### Mechanical Engineering III

<b>JOHN BOYLE</b>	Using Liquid Crystals to Measure Shear Stresses in Cells
<b>EDGAR ALOR</b>	Tractor Trailer Drag Reduction
<b>JASON CURTIS</b>	Hydrogen Internal Combustion Engines: Optimizing Fuel Tracers
<b>MATTHEW ADAMS</b>	In-vivo measurement of strain field gradients in an amphibian heart after artificially-induced myocardial infarction
<b>STEVEN HOPENGARTEN</b>	Design and Fabrication of a Full Suspension Mountain Bike Suspension System

### Social Sciences Building—012

Moderator: Cliff Brown

#### Political Science III

<b>HUGH CAREY</b>	Biography of Governor Hugh L. Carey
<b>ALAN COHOLAN</b>	Science and Lobbying Concerning Global Warming
<b>TREVOR FLIKE</b>	The Political Thought of William F. Buckley, Jr.
<b>ARON MANDEL</b>	The Economy's Effects On Gubernatorial Elections

### Social Sciences Building—014

Moderator: Mark Walker

#### History II

<b>ADAM KOSLIN</b>	Economic, Political, and Ideological Development in Post-Reconstruction Virginia
<b>BETH SOLOMON</b>	Social Theories Behind the Growth and Development of the German Universities

### Social Sciences Building—016

Moderator: David Cotter

#### Sociology & Africana Studies

<b>GILLIAN RUSSO</b>	Women in the Military
<b>JAMIE KRASNOFF</b>	The Affect of Hip Hop Culture on America
<b>MADELYN DE LEON</b>	An Assesment of Health Education in New York City Public Schools
<b>MONICA VIELKIND</b>	Childhood Obesity: Integrating the Individual and Public Health Perspectives
<b>TATUM WEISHAAPT</b>	Adolescent Sexual Health in Schenectady: Improving Public Health Programming

### Social Sciences Building—017

Moderator: Stephen Schmidt

#### Economics Honors IV

<b>OMAR JILANI</b>	Effect of Maternity-Leave Policies on Fertility Rates in OECD Countries
<b>MATTHEW COOK</b>	Antitrust Law and Illinois Walls
<b>CHELSEA HARGIS</b>	Do Gambling Establishments Increase White-Collar Crime
<b>ANDREW MACKENZIE</b>	The Heuristic Search Model of Bounded Rationality
<b>JACOB SHAFFREN</b>	A New Cold War? A Game Theoretical Analysis of a Chinese and Venezuelan Relationship

# Session V

**4:00 – 5:30 p.m. • Theater & Dance Department**

## NOTT MEMORIAL

### Dance Performances

*Faculty Sponsor & Show Director – Miryam Moutillet*

Faculty Choreographers                      *Miryam Moutillet, Carla Domenico-Wasbes and Marcus Rogers*

Stage Manager                                      *Darrell Tulcin*

Live Music by Nine Inch Nails              *Andy Iorio – Musical Director*  
*Tristan Allen - Keyboard*  
*Jake Klein – Drums*  
*Julio Vidal - Guitar*  
*Will Wilkins – Bass*

### Dance Experience Collaborative

*Just Like You Imagined*                      *Directed by Miryam Moutillet*  
Created and performed by Valerie Angell, Julia Friedman, Krystle Gallo, Shauna Keeler, Jennifer Lachance, Kira Moldow, Jessica Nagourney, Erin Schumaker, Emily Stano and Samantha Zayas

### Physical Theatre

*The Hand that Feeds*                              *Directed by Miryam Moutillet*  
Created and performed by Valerie Angell, Zachary Barash, Annie Benfield, Sarah Coleman, Kira Moldow, Lacey Morgan, Thomas Perry, Ayanna Vinson-Dobson and Samantha Zayas

### Dance Projects

*A Warm Place*                                      *Choreographed and performed by Annie Benfield and Amelia Patten-Whitney*

*I'd Rather Dance*                                      *Choreographed by Erin Bligh*  
Dancers: Joey Abate, Valerie Angell, Erin Bligh, Peter Bonventre, Dave Sayles and Samantha Zayas

*Toxic Waste*    *Choreographed by Jennifer Fleischer and Katie Newingham*  
Jennifer Fleischer, Shauna Keeler, Katie Newingham, Kaitlyn O'Connor, Katie Sofia and Julie Vairo

# Session V

**4:00 – 5:30 p.m. • Theater & Dance Department (cont'd)**

## Ballet III

*Zero-Sum*

*Choreographed by Miryam Moutillet*

Dancers: Colleen Easton, Shauna Keeler, Danielle Kreig, Alexandra Lindsay, Kira Moldow

## Modern Choreography

*The Mark Has Been Made*

*Choreographed by Miryam Moutillet*

Dancers: Annie Benfield, Jen Fleischer, Shauna Keeler, Danielle Kreig, Lacey Morgan, Katie Newingham, Nozomi Sakata, Ayanna Vinson-Dobson and Amelia Patten Whitney

## Jazz Choreography

*Just Dance*

*Choreographed by Marcus Rogers*

Dancers: Anna Finlay, Krystle Gallo, Emily Lnenicka, Kaitlyn O'Connor, Julie Vairo, Amanda Wiener and Samantha Zayas

## Tap Dance

*Retox the Freak*

*Choreographed by Marcus Rogers*

Dancer and Drummer: Jacob LaRocca

## Dance Team

*Break the ice, ice Baby*

*Choreographed and performed by*

Amy Cerini, Jen Fleischer, Rachel Fitz, Krystle Gallo, Amy Gold, Adrienne Hart, Sara Mark, Kira Moldow, Andrea Morehouse, Jessica Nagourney, Robin Panella, Rachael Singleton, Katie Sofia and Emily Stano

## Ballroom Dance Club

*Buleria*

*Choreographed by Amber Woerner*

Dancers: Joey Abate, Valerie Angell, Zachary Barash, Erin Bligh, Pete Bonventre, Emily Burgess, Megan Hyndman, Ben Miles, Dave Sayles, Maggie Wilson, Samantha Zayas and Adam Zinman

## Bhangra Union

*For this performance, we want to thank  
The International Education Foundation (IEF)  
Dean David Hayes / Arts and Sciences  
The Theater Program for their technical support*

# Visual Arts Exhibition — May 1st and 2nd

## Burns Arts Atrium Gallery • Arts Building

### Traditional and Digital Photography

*Faculty sponsor*

*Martin Benjamin:*

- Meredith Brandon
- Emily Burgess
- Pert Divis
- Brittany Felton
- Alexandra Giromini
- Lindsey Goldberg
- Russell Goldenberg
- Meghan Haley-Quigley
- Jared Hotaling
- Toby Leeger
- Steven Leung
- James Morton
- Dan Phakos
- Alec Rosen
- Megan Sesil
- Jonathan Scheff
- Caitlin Sullivan

### Sculpture

*Faculty sponsor*

*Chris Duncan:*

- Samantha Boldt
- Michael Bono
- Albert Bramble
- Lisa Cresenzo
- Tara David
- Robert Shirley
- Anne Terkovich
- Nancy Wilk

### Drawing & Painting

*Faculty Sponsor*

*Walter Hatke:*

- Emily Burgess
- Brittany Gilbert
- Elizabeth Hart
- Annabelle Murphy
- Sophia Tamura
- Hilary Zelson

### Digital

*Faculty sponsor*

*Fernando Orellana:*

- Beth Culp
- Allie Kuzcko
- Will Pinkston
- Joe Randazzo
- Jan Spidlen
- Sarah Scott
- Brace Thompson
- Megan Sesil
- Steven Leung
- Julia Vu
- Joe Randazzo
- Jan Spidlen
- Carolyn Canetti
- Albert Bramble

### Printmaking, Design Fundamentals and Advanced Drawing Exhibition

*Faculty Sponsor*

*Sandy Wimer:*

#### Drawing II:

- Katherine Cissel
- Kevin Fallon
- Bianca Germain
- Aaron Levine
- Kate MacEwan

#### Printmaking:

- Denly Lettsome
- Emmaline Payette
- Megan Sesil
- Brace Thompson
- Wesley Whitaker
- Mary Frank
- Lauren Muske
- Hilary Salander
- Robert Shirley
- Elsa Perushek
- Paul John

#### Design Fundamentals:

- Elsa Perushek

#### Independent study in printmaking and drawing:

- Ian Brennan



# Union College Jazz Ensemble

**Saturday, May 2, 2009 • 1:00-2:00 p.m.**

*Professor Timothy Olsen, Director*

**Taylor Music Center**

**Fred L. Emerson Foundation Auditorium**

## FLUTE

*Jessica Nagourney '12*

## SAXES

*Greg Bloom '11*

*Peter Bonventre '11*

*Charles Fontana '09*

*Devin Harrison '09*

## TRUMPET

*Rachel Finkelstein '12*

*Nikhil Patel '09*

*Nick Potvin '09*

## TROMBONE

*Sara Deady '12*

*Jacob LaRocca '12*

## VIBES

*Tom Perry '09*

## PIANO

*Luke Bryden '09*

*Tom Perry '09*

*Geoffrey Raynor '09*

## GUITAR

*David Kislik '10*

## BASS

*Jacob Witkop '12*

## DRUMSET/PERCUSSION

*Andrew Donnelly '10*

*William Hernandez '09*

*Jakob Klein '09*

## VOCALS

*Yubin Choi '11*

*William Hernandez '09*



*The Union College Department of Music*  
*presents*  
**Steinmetz Concert 2009**

*by*  
*The Union College Camerata Singers*  
*Victor Klimash, Conductor*  
*and*  
*The Union College and Community Orchestra*  
*Victor Klimash, Conductor*  
*with*  
*Wesley Pyen ('09), Violin*

8:00pm — Friday, May 1, 2009  
*The Union College Memorial Chapel*

*Program*

I

Four Motets

*Ubi caritas*  
*Tantum ergo*  
*Tota pulchra es, Maria*  
*Tu es Petrus*

Maurice Duruflé (1902-1986)

*The Union College Camerata Singers*

II

The Hebrides Overture (*Fingal's Cave*)

Felix Mendelssohn (1809-1847)

*The Union College and Community Orchestra*

III

Concerto for Violin and Orchestra, Opus 48

*Allegro molto e con brio*  
Wesley Pyen ('09), Violin

Dmitri Kabalevsky (1904-1987)

IV

A Lincoln Portrait

Aaron Copland (1900-1990)

## The Union College Camerata Singers

Victor Klimash, *Conductor* • Lyda Urresta, *Assistant to the Conductor*

### *Soprano*

Heidi Ching  
Emily Lnenicka  
Kara McCabe  
Lyda Urresta

### *Tenor*

Emmett O'Connell  
Nicholas Potvin  
Geoffrey Raynor  
Alex Schlosberg

### *Alto*

Faryn Freireich  
Emily Karam  
Eliana Lakritz  
Lauren Obst

### *Bass*

Zachary Barash  
Phillip Castonguay  
Evan Kalkbrenner  
Raymond Marini

## The Union College and Community Orchestra

Victor Klimash, *Conductor* • Rachel Gray, *Assistant to the Conductor*

### *Violin I*

Wesley Pyen  
Shalini Singaravelne  
Ted Mihran  
Virginia Traver  
David Wilkinson  
Ann K. Seidman  
Shabana Hoosein  
Brian Rosenblatt  
Jayne McCann  
Gino Bianchi

### *Viola*

Samuel Yoon  
Rachel Farnum  
Edith Kliman  
Darren Del Dotto  
Lily Marto  
Karl O. Brosch  
Peggy Gerardi

### *Flute*

Cassie Blanchette  
Johannah Ryan

### *Clarinet*

Alex Post  
Ajay Major  
English Horn  
Diane S. Baltazar

### *Horn*

Gus Birkhead  
Josef Schmee  
Robert Viets  
Trombone  
Richard Hunsberger  
Wesley Smith  
Jacob LaRocca

### *Tuba*

Connor Dodd

### *Harp*

Leah Kidwell-Fernandes

### *Violin II*

Marion Kouzan  
Patrick J. Lingane  
Moe Brand  
Janet Weick  
Carol Blom  
Virginia Gordon  
Carol Meyer  
Elizabeth Graham

### *Violoncello*

Cathie-Jo Brun  
Tim Johnson  
Karen Brooks  
Nancy Teichner  
Ellen Gunst  
Beatrice Kovasznyay  
Oakley Frost  
Misty Shah

### *Contrabass*

Elana Korn

### *Oboe*

Rachel Gray  
Camille Mori  
Bassoon  
Katie Jordon  
Nehal Thakkar

### *Trumpet*

Vince Castelli



